WHAT IS CLAIMED IS:

1. A template matching method for searching a matching area having the highest correlation with a template including a reference point in a first image from a second image, the template matching method comprising:

calculating a difference between a corresponding point of the reference point in the second image and an estimated point of the reference point which is calculated by the template matching method; and

determining at least one of parameters of the template matching, the parameters comprising the reference point, a size of the template and resolutions of the first and second images based on the difference.

2. The method according to claim 1, wherein the difference comprises an upper bound of average distance between the corresponding point and the estimated point.

3. The method according to claim 1, wherein the calculating comprises:

calculating non-similarity or similarity between a first area including the corresponding point of the second image and a second area to which the first area is moved within a predetermined searching area within the second image, and

finding the difference using a plurality of non-similarity or similarity calculated with respect to a

plurality of the second areas within the searching area.

4. The method according to claim 1, wherein the determining comprising determining the reference point based on a reference candidate whose difference is minimum from a plurality of reference point candidates.

5. The method according to claim 1, wherein the determining comprises finding a maximum size of the template giving a smaller difference than a threshold value.

6. The method according to claim 1, wherein the determining comprises finding a minimum resolutions of the first and second images giving a smaller difference than a threshold value.

7. An article of manufacture comprising a computer usable medium having computer readable program code means embodied therein, the computer readable program searching a matching area having the highest correlation with a template including a reference point in a first image from a second image, the computer readable program code means comprising:

computer readable program code means for causing a computer to calculate a difference between a corresponding point of the reference point in the second image and an estimated point of the reference point which is calculated by the template matching method; and

computer readable program code means for causing a computer to determine at least one of parameters of the template matching, the parameters comprising the reference point, a size of the template and resolutions of the first and second images based on the difference.

8. An article of manufacture according to claim 7, wherein the difference comprises an upper bound of average distance between the corresponding point and the estimated point.

9. An article of manufacture according to claim 7, wherein the computer readable program code means for causing a computer to calculate a difference calculates non-similarity or similarity between a first area including the corresponding point of the second image and a second area to which the first area is moved within a predetermined searching area within the second image, and finds the difference using a plurality of non-similarity or similarity calculated with respect to a plurality of the second areas within the searching area.

10. An article of manufacture according to claim 7, wherein the computer readable program code means for causing a computer to determine at least one of parameters determines the reference point based on a reference candidate whose difference is minimum from a plurality of reference point candidates.

11. An article of manufacture according to

claim 7, wherein the computer readable program code means for causing a computer to determine finds a maximum size of the template giving a smaller difference than a threshold value.

12. An article of manufacture according to claim 7, wherein the computer readable program code means for causing a computer to determine finds a minimum resolutions of the first and second images giving a smaller difference than a threshold value.

13. An image processing device for searching a matching area having the highest correlation with a template including a reference point in a first image from a second image, comprising:

a calculation unit configured to calculate a difference between a corresponding point of the reference point in the second image and an estimated point of the reference point which is calculated by the template matching method; and

a determination unit configured to determine at least one of parameters of the template matching, the parameters comprising the reference point, a size of the template and resolutions of the first and second images based on the difference.

14. The device according to claim 13, wherein the difference comprises an upper bound of average distance between the corresponding point and the estimated point.

15. The device according to claim 13, wherein the calculation unit comprises:

a calculation unit configured to calculate non-similarity or similarity between a first area including the corresponding point of the second image and a second area to which the first area is moved within a predetermined searching area within the second image, and

a finding unit configured to find the difference using a plurality of non-similarity or similarity calculated with respect to a plurality of the second areas within the searching area.

16. The device according to claim 13, wherein the determination unit determines the reference point based on a reference candidate whose difference is minimum from a plurality of reference point candidates.

17. The device according to claim 13, wherein the determination unit finds a maximum size of the template giving a smaller difference than a threshold value.

18. The device according to claim 13, wherein the determination unit finds a minimum resolutions of the first and second images giving a smaller difference than a threshold value.